

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 September 2005 (29.09.2005)

PCT

(10) International Publication Number  
**WO 2005/091061 A1**

(51) International Patent Classification<sup>7</sup>: **G02F 1/1335**

(74) Agent: MARSH, David; Building 3 Filton Road, Bristol BS34 8QZ (GB).

(21) International Application Number:  
PCT/EP2005/051259

(22) International Filing Date: 17 March 2005 (17.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0406317.8 20 March 2004 (20.03.2004) GB

(71) Applicant (for all designated States except US):  
**HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.** [US/US]; Legal dept., 20555 S.H. 249, Houston, Texas 77070 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RUDIN, John Christopher** [GB/GB]; Hewlett-Packard Limited, Filton Road Stoke Gifford, Bristol BS34 8QZ (GB). **GEISOW, Adrian Derek** [GB/GB]; Hewlett-Packard Limited, Filton Road Stoke Gifford, Bristol BS34 8QZ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

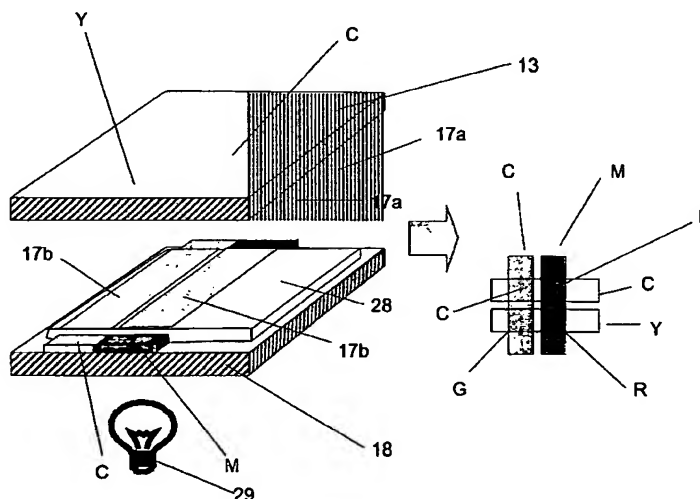
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: COLOUR DISPLAY DEVICE AND METHOD OF MANUFACTURE



(57) Abstract: A colour display device comprises: a first display substrate (13) and a second display substrate (18), said substrates being spaced apart and opposed to each other; a layer of an electro-optic material (27) between the substrates; a set of first electrodes (17a) on an inner surface of the first display substrate (13) and a set of second electrodes (17b) on an inner surface of the second display substrate (18), the first electrodes (17a) overlapping the second electrodes (17b) to define pixels for selectively applying an electric field across at least some of said electro-optic material; a set of first colour filters (CY) on the first display substrate, each of said first electrodes being in register with one of said first colour filters; and a set of second colour filters (CM) on the second display substrate, each of said second electrodes being in register with one of said second colour filters. The colour of light transmitted through a pixel is determined by the light transmitted by both the first colour filter and the second colour filter that intersect at that pixel.

WO 2005/091061 A1